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ABSTRACT

Proponents of early childhood education frequently refer to the importance of parent involvement for children's school success. However, little is known about characteristics of families that are more likely to become involved in their children's educational experience. This study provided follow-up data on 221 inner-city children (median age = 144 months) previously found to benefit from increased parent involvement during preschool, kindergarten, and the primary grades. Demographic and school-related predictors of involvement were further examined as children made the transition from elementary to junior high school. Findings indicated that parents whose children had attended Head Start were significantly more involved in their children's education at Year 8 or Year 9 than were parents whose children had attended pre-kindergarten in the same public school system. Current involvement was associated with higher grades, while past involvement had a positive impact on achievement test scores and school competence. (Contains 14 references.) (Author/EV)

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Predicting Parent Involvement and Its Influence on School Success: A Follow-Up Study

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Abstract

The present study provided follow-up data on 221 inner-city children (median age = 144 months) previously found to benefit from increased parent involvement during preschool, kindergarten, and the primary grades. Demographic and school-related predictors of involvement were further examined as children made the transition from elementary to junior high school. Parents whose children had attended Head Start were significantly more involved in their children's education at Year 8 or Year 9 than were parents whose children had attended pre-kindergarten in the same public school system. Current involvement was associated with higher grades, while past involvement had a positive impact on achievement test scores and school competence.

Predicting Parent Involvement and Its Influence on School Success: A Follow-Up Study

Proponents of early childhood education frequently refer to the importance of parent involvement for children's school success (e.g., Lazar et al., 1987; Moore, 1987; Slaughter & Epps, 1987; Weikart, 1989). Zill (1996) found higher levels of parent involvement to be associated with better student outcomes on nearly all achievement and behavior measures. Studies of low-income children using teacher-rated parent involvement in school have shown positive effects on academic and social measures at the end of Head Start (Taylor & Machida, 1994), in first grade (Reynolds, 1989), and third grade (Marcon, 1993). The positive impact appears to be especially strong in grades 3 through 5 (Crimm, 1993).

However, little is known about characteristics of families that are more likely to become involved in their children's educational experience. Teacher attitudes and parental characteristics may influence whether parents become partners in the education experience (Epstein & Dauber, 1991). For example, kindergarten teachers who are committed to developmentally appropriate practices are more likely to promote parent involvement (Swick & McKnight, 1989). Marcon (1993) found the most notable predictor of third grade involvement was parent involvement during kindergarten which was, in turn, best predicted by enrollment in Head Start. This latter finding shows Head Start's impact on two generations, and provides further support for Head Start's devotion of considerable effort to parental empowerment.

Follow-up data on parent involvement are useful. Seven years after participating in a Chicago preschool program for low-income families, Reynolds et al. (1996) found mediating effects of parents' school involvement on program benefits for school achievement and retention. In high-risk neighborhoods parent involvement seems especially important during the transition from elementary to middle school (Eccles & Harold, 1993), and plays a vital role

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in denoting which children remain at-academic-risk or improve academically across the transition (Vito, 1993). The present study provided follow-up data on inner-city children previously found to benefit from increased parent involvement during preschool, kindergarten, and the primary grades. Demographic and school-related predictors of involvement were further examined as children made the transition from elementary to junior high school.

Method

A total of 221 children from the Classes of 2000 and 2001 (median age = 144 months) enrolled in 91 public schools in Washington, D.C. were studied during their eighth (Grade 6) or ninth (Grade 7) year in school. Before entering kindergarten, 22% of the sample had attended Head Start and 78% had attended free pre-kindergarten in this public school system. The sample was 98% African American and 54% female. Most children (80%) qualified for subsidized lunch based upon low family income, and 77% lived in single-parent homes.

Children's pres ool, kindergarten, and third grade teachers were previously interviewed to determine extent of contact they had with each child's parent(s). Year 8 or Year 9 teachers were interviewed in the current study. Categories of contact included parent-teacher conference, home visit by teacher, extended class visit by parent, and parental help with class activity. At each grade, two groups of children were identified based upon low (0 or 1 category fulfilled) or high (3 or 4 categories fulfilled) involvement. All current data were analyzed for effects of earlier and current parent involvement. A covariate (eligibility for subsidized lunch) was used to control for possible economic differences between families.

School, child, and family characteristics that might influence parent involvement were entered into stepwise regression analysis. School characteristics included a) type of preschool program (Head Start vs. Pre-K), b) preschool model (child-initiated, academically-directed, middle-of-

the-road), and c) kindergarten model (socioemotional vs. academic preparation) attended.

Child characteristics included sex, age, absences, previous grade retention, and special needs.

Family characteristics included SES, single- vs. two-parent family, mobility, and earlier parent involvement.

Results

Current Parent Involvement

Parents whose children had attended Head Start were significantly more involved in their children's education at Year 8 or Year 9 than were parents whose children had attended Pre-K ($\chi^2(1) = 4.23$, p < .05). This was noteworthy because lower income families were generally less involved in children's current school experiences ($\chi^2(1) = 8.32$, p < ..01). This was not true of Head Start families although they were poorer than Pre-K families ($\chi^2(1) = 9.45$, p < .01). No differences in current involvement were found between single-and two-parent families (p = .53), and parents of boys were as likely as parents of girls to be currently involved (p = .23). While previous levels of involvement were not predictive of current level, parents whose children had attended a child-initiated preschool tended to be more involved in their children's education at Year 8 or Year 9 ($\chi^2(1) = 3.39$, p = .06).

The regression model reported in Table 1 accounts for 7% of the variance in current parent involvement, with income (higher) being the most notable predictor, followed by child's age (younger), participation in Head Start, and successfully passing the primary grades.

Insert Table	1 about here

Although R² is small, discriminant analysis using these four variables successfully classified 72.73% of the parents in this study into either low or high categories of parent involvement. Classification using type of preschool program alone (Head Start vs. Pre-K) correctly classified 69.23% of the sample, although that lone variable was more accurate in identifying low involvement.

School Competence

By junior high school, 12% the sample was receiving special education services and 36% had been retained. Children whose parents had been uninvolved in first grade were more likely to be in special education ($\chi^2(1) = 8.64$, p < .01). Although extent of preschool involvement did not significantly affect retention rates before entering junior high, children whose parents had been uninvolved in kindergarten ($\chi^2(1) = 6.32$, p < .01), first ($\chi^2(1) = 7.26$, p < .01), or third grade ($\chi^2(1) = 3.84$, p < .01) were more likely to be retained. Current level of parent involvement was not significantly related to placement in special education (p = .64) or retention in grade (p = .11). By junior high, children who had attended Head Start did not differ from classmates who had attended Pre-K in special education placement (14.5% vs. 13%, p = .78) or retention in grade (34% vs. 31%, p = .58).

Student Achievement

The influence of current parent involvement on Year 8 or Year 9 grades is reported in Table 2. High current involvement was associated with a significantly higher overall grade point average (GPA) and significantly higher grades in 8 of 11 subjects (math, language, handwriting, science, art, music, health, and citizenship). No differences in current grades were associated with earlier parent involvement.

Insert Table 2 about here

Examination of sixth grade standardized achievement test scores (Comprehensive Test of Basic Skills-CTBS) indicated no significant impact of current parent involvement on test scores. While parent involvement in preschool, kindergarten, and first grade had no significant effect on sixth grade CTBS scores, third grade parent involvement did (see Table 3). Children whose parents had been highly involved in third grade scored higher in all sixth grade CTBS areas. These differences were significant for reading vocabulary, math concepts and application, and science. A trend toward higher reading comprehension (p < .07), total reading (p < .06), total battery (p < .08), and social science (p < .11) scores was noted.

Insert Table 3 about here

Discussion

Head Start continues to have an endering positive impact on parent involvement even as children enter junior high school. In this study, current involvement was associated with higher grades, while past involvement had a positive impact on achievement test scores and school competence. While lower family income was generally predictive of lower involvement, this was not the case for Head Start families. This Head Start's program emphasis on parental empowerment and a child-initiated model of early childhood education appear to have had an enduring impact on the families served. Seven and eight years after their children have left Head Start, parents in our nation's capital remain involved in their children's educational experiences and the effect is notably positive.

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. able 1 Predictor Variables with Significant Beta Weights for Categorical Variables Predicting the Criterion Variable of Current Parent Involvement

Category	<u>r</u>	Beta	R	R ² (cumulative)
	10 22	1044		025
Family Income	19**	18**	.19	.035
Child's Age	14**	12**	.23	.053
Head Start Enrollment	.09**	.12**	.25	.065
Retention Prior to 3 rd Grade	11**	09*	.27	.073

^{*} p < .05

^{** &}lt;u>p</u> < .01

Table 2

'Year 8' or 'Year 9' Progress Report Grades (Means Adjusted for SES Covariate)

	Cu		Involvement		
Subject		Low	High	ANCOVA	
Overall GPA	M SD	2.27 (.82)	2.82 (.53)	$\underline{F}(1, 111) = 10.17, p < .01$	
Mathematics	<u>M</u> <u>SD</u>	1.98 (1.15)	2.65 (.92)	\underline{F} (1, 109) = 6.95, \underline{p} < .01	
Reading	M SD	2.11 (1.04)	2.41 (.87)	$\underline{F}(1, 82) = 1.56, p = .22$	
Language	M SD	2.11 (.95)	2.61 (.74)	F(1, 84) = 5.42, p < .05	
Spelling	M SD	2.08 (1.23)	2.54 (.88)	$\underline{F}(1, 82) = 2.73, \underline{p} = .102$	
Handwriting	<u>M</u> <u>ŞD</u>	2.42 (.73)	2.98 (.64)	F(1, 80) = 10.12, p < .01	
Social Studies	<u>M</u> SD	2.14 (1.17)	2.57 (.87)	\underline{F} (1, 105) = 2.67, \underline{p} = .105	
Science	<u>M</u> <u>SD</u>	2.21 (1.24)	2.85 (.70)	$\underline{F}(1, 106) = 5.66, \underline{p} < .05$	
Art	<u>M</u> <u>SD</u>	2.63 (.93)	3.17 (.82)	$\underline{F}(1, 73) = 5.06, p < .05$	
Music	<u>M</u> SD	2.74 (1.03)	3.33 (.69)	F(1, 70) = 4.69, p < .05	
Health/PE	<u>M</u> SD	2.78 (1.08)	3.30 (.80)	$\underline{F}(1, 89) = 4.31, p < .05$	
Citizenship	<u>M</u> SD	2.13 (1.09)	2.84 (.80)	$\underline{F}(1, 101) = 9.02, p < .01$	

Note. Grades were calculated on a 4-point scale with 0 = F and 4 = A. Subject areas assessed by the 'Year 8' or 'Year 9' Progress Report varied according to student course schedule.

Table 3
Sixth Grade CTBS Standardized Achievement Test Scores (Means Adjusted for SES Covariate)

Parent Involvement in 3 rd Grade					
Scale		Low	High	ANCOVA	
Feading					
Vocabulary	$rac{\mathbf{M}}{\mathbf{S}\mathbf{D}}$	47.26 (16.40)	53.62 (18.28)	F(1, 118) = 4.00, p < .05	
Comprehension	M SD	47.81 (16.76)	54.19 (21.45)	$\underline{F}(1, 118) = 3.46, p = .065$	
Total Reading	M SD	47.60 (15.31)	53.63 (19.19)	\underline{F} (1, 11 ω) = 3.75, \underline{p} = .055	
Language					
Spelling	<u>M</u> <u>SD</u>	55.26 (16.42)	59.96 (17.76)	\underline{F} (1, 118) = 2.23, \underline{p} = .14	
Mechanics	<u>M</u> SD	51.56 (18.5 ₁)	56.57 (16.83)	$\underline{F}(1, 118) = 2.44, p = .12$	
Expression	<u>M</u> SD	47.14 (13.24)	51.06 (16.41)	F(1, 118) = 2.20, p = .14	
Total Language	<u>M</u> SD	51.02 (15.96)	55.55 (17.00)	\underline{F} (1, 118) = 2.37, \underline{p} = .126	
Mathematics					
Computation	<u>M</u> <u>SD</u>	60.79 (21.40)	63.30 (22.79)	E(1, 118) = .38, p = .54	
Concepts and Application	<u>M</u> <u>SD</u>	49.77 (17.44)	56.26 (17.42)	\underline{F} (1, 118) = 4.18, \underline{p} < .05	
Total Math	<u>M</u> SD	56.14 (19.55)	61.58 (19.23)	\underline{F} (1, 118) = 2.36, \underline{p} = .127	
Total Battery	<u>M</u> <u>SD</u>	50.88 (15.70)	56.18 (17.32)	$\underline{F}(1, 118) = 3.22, p = .076$	
Reference Skills	<u>M</u> SD	52.11 (16.90)	56.88 (16.61)	$\underline{F}(1, 117) = 2.37, p = .13$	
Science	<u>M</u> SD	44.49 (15.62)	52.02 (21.21)	$\underline{F}(1, 114) = 4.78, p < .05$	
Social Studies	<u>M</u> SD	48.44 (14.44)	53.02 (15.82)	$\underline{F}(1, 114) = 2.61, p = .109$	

Note. Scale standard score mean = 50.